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ABSTRACT

Occupational research and development goals concern: (1) stimulating occupational research and development activities, (2) developing coordination for a state system of occupational research and development, (3) maintaining information of research findings and needs, (4) increasing producer and consumer competence of state personnel, and (5) providing guidance and counseling service for potential researchers. Seventeen research projects have been approved by the Research Coordinating Unit, covering various aspects of curriculum development and vocational training. Brief descriptions of each project are included. (JK)

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FINAL REPORT

Grant Number 3-6-062717-2144

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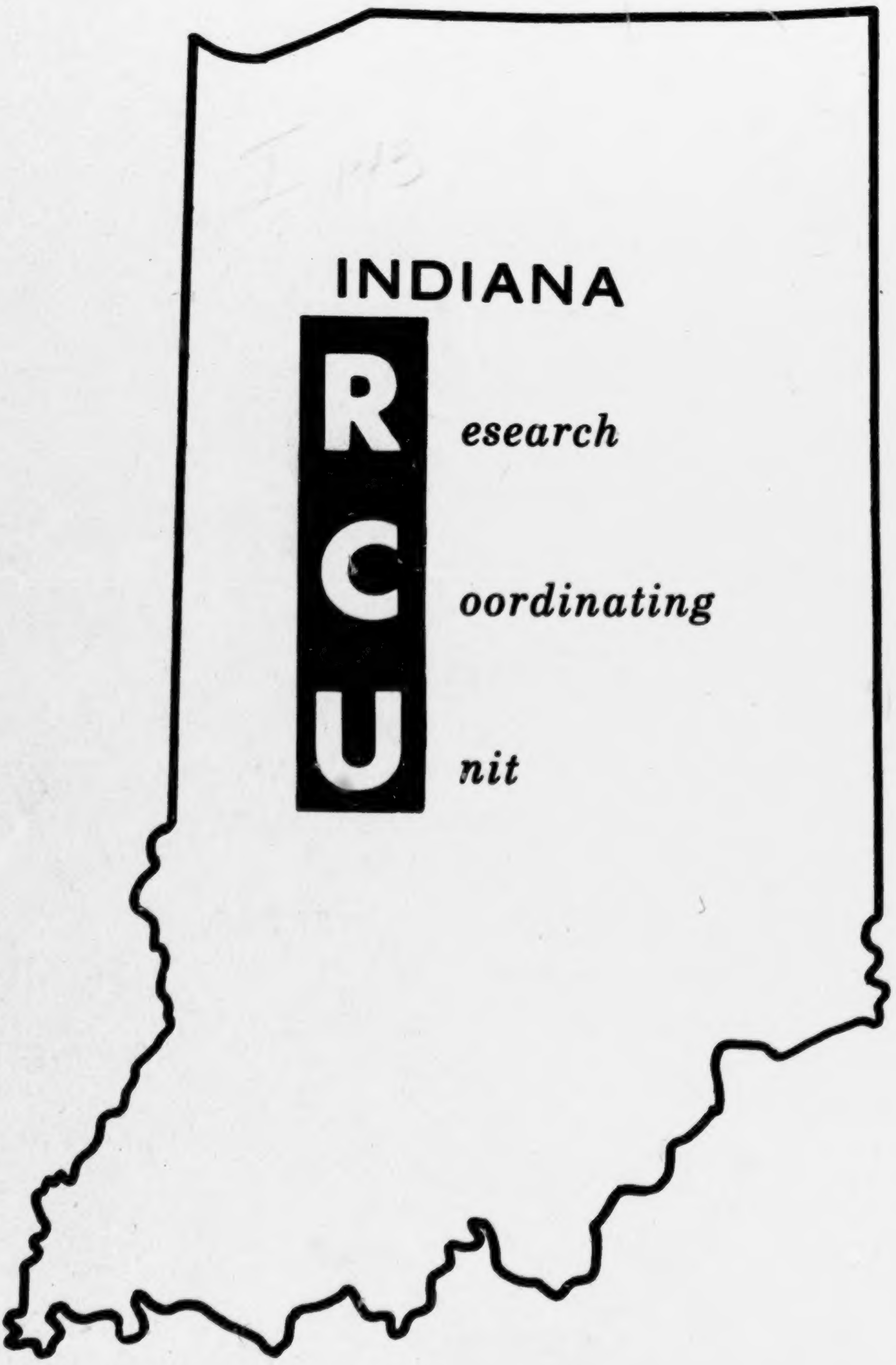
INDIANA
Research
Coordinating
Unit

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Office of the State Superintendent of Public Instruction
Division of Vocational Education
Research Coordinating Unit

ED034897

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OF PUBLIC INSTRUCTION

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FORWARD

The summary of these projects in this final report represent the Vocational Research Output of Indiana as reported to the Research Coordination Unit.

The research projects developed in Indiana during this time have been approved maintaining the philosophy and the goals of the Indiana Research Coordinating Unit which includes the following: (1) Stimulation for occupational research and development activities. (2) Leadership and coordination for a state system of occupational research and development. (3) Maintaining research information of findings and needed research. (4) Providing continuing data on employment and training needs and related areas of teacher training, recruitment and placement. (5) Increase in the research and development producer and consumer competence of state personnel through pre-service and in service programs and (6) Providing guidance and consulting service for potential researchers.

The goal of the Indiana Research Coordinating Unit is the continuous improvement of teaching and learning, the educational process, and the various environments for learning.

Research, theoretical and applied, is a means to an end and not an end in itself. As a total to be used in planning, programming, and modifying concepts and activities of Vocational Education, it should result in some impact or influence in this field of education.

The Research Coordinating Unit has been established to stimulate and coordinate research and development in Vocational Education in Indiana and to disseminate research information.

There have been Seventeen Research Projects approved by the Indiana Research Coordinating Unit. These projects have resulted in significant findings in various of disciplines that have become and will continue to be useful to a wide spectrum of education.

The major role of Indiana Research Coordinating Unit is to serve the state and the people of Indiana by providing a clearing house for Vocational research information and findings, providing services to potential researchers in areas of Vocational Education, coordinating research activities, helping to identify needed areas of research and encouraging all vocational education to participate in research activities.

This collection of these studies and dissemination of their findings is one of the key functions of the Research Coordinating Unit. We hope that all of the services of the Research Coordination Unit will be continually and fully utilized.

Robert E. Howard
Research Coordinating Unit
Room 401 State Capitol Building
Indianapolis, Indiana 46204

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INDIANA RESEARCH COORDINATING UNIT
PROJECT NUMBER 101

GRANT NUMBER 3-6-062717-2144

A COOPERATIVE ENDEAVOR BETWEEN THE DIVISION OF VOCATIONAL EDUCATION AND INDIANA STATE UNIVERSITY TO BUILD AND REVISE THE INDIANA HOME ECONOMICS CURRICULUM

Coordinator:
Dr. Marjorie C. Jerry
Vocational Home Economics
Indiana State University

Purpose:

Project for planning and developing curriculum in Vocational Home Economics.

This project was implemented by a curriculum specialist working with an advisory committee appointed by the Office of the Indiana State Superintendent of Public Instruction, Vocational Division, Department of Home Economics Education. This committee was given the responsibility for planning and carrying out such procedures as were necessary to accomplish the operational objectives of the project.

The Advisory Committee was composed of members, including senior high school home economics teachers, junior high school home economics teachers, school superintendents, secondary school principals, vocational school directors, city home economics supervisors, university home economics, teachers and educators, Indiana vocational education staff members, and people from the related business world. The public school personnel were selected so that representation was included from rural school corporations, large consolidated school corporations, and inner city schools.

According to the procedure as outlined in the project contract, the curriculum specialist taught a graduate class--Curriculum Development in Home Economics Education--during the 1968 summer session in the Indiana State University campus and during each of the two semesters during the regular 1968-69 academic year.

A curriculum survey questionnaire was prepared and administered to all Indiana vocational home economics teachers in order to identify the current status of involvement of personnel and materials in curriculum implementation. (See project exhibits.) The results of the survey provided guidelines for initiating facets of the project. In addition, each respondent was given the opportunity to volunteer for participation in the evaluation of working papers produced through the project. A file, by vocational districts, was compiled; and these teachers have been utilized as the evaluation group throughout the remainder of the year.

A system analysis for home economics curriculum development in Indiana, including the tasks to be performed and the personnel to complete each task, has been developed and accepted. (See project exhibits.)

A form was developed to secure the active participation of teachers in the evaluation of the Indiana Resource Guide for Human Development and the Family, which was distributed for use in the fall of 1968. The responses of teachers were tabulated and reported. (See appendix I.)

The curriculum specialist served as a consultant for numerous teachers and projects. She also worked closely with a subject matter specialist in planning and conducting several sessions of a course in program development in family economics and home managements.

The curriculum specialist served as a member of the art section committee of the Indiana Home Economics Association in developing materials to integrate teaching art with the 1968-69 Indiana home economics curriculum. The materials developed were produced and distributed under the auspices of the project. (See project exhibits.)

Each segment of curriculum material produced as a part of the project has been accompanied by an evaluation form in writing to be completed by the users and returned to the curriculum office for tabulation. (See project exhibits for copies of evaluation forms.)

A proposed format for the presentation of curriculum guide materials was developed and evaluated. (See project exhibits.)

A proposed revision of the scope and sequence for the Indiana vocational home economics curriculum was developed, evaluated, and revised. Further revisions were made after consultation with the State Vocational Home Economics staff. (See project exhibits.)

Every effort was expended in revising and updating materials to include increasing emphasis on consumer education. A pilot study was conducted surveying the home economics concepts currently taught in the elementary schools. The study instrument was refined and a larger sample was surveyed. The results of this study were reported at the 1969 summer Indiana Vocational Conference held in Muncie, Indiana, in August. Copies of the survey instrument were distributed to vocational home economics teachers to stimulate assessment of home economics concepts being taught in the elementary schools in each of the local situations in which these pupils matriculate to a vocational home economics program. The purpose of this phase of the project was to facilitate improvement of the home economics program at the entry level. (See project exhibits.) A written report will be prepared of the study results in the fall of 1970 as a part of the continuation of the project.

Working papers providing a conceptual framework in Clothing and Textiles and in Housing were distributed to the evaluating teachers. (See project exhibits.) The evaluation responses were tabulated and will be used for revisions of the conceptual frameworks and as guidelines in the preparation of additional curriculum guide materials.

Commitments were made for the preparation of conceptual frameworks in Food and Nutrition and in Management, and for the development of a publicity guide for consumer and homemaking teachers. The publicity guide and the Management framework were distributed at the 1968 Summer Vocational Education Conference in Muncie, Indiana. (See project exhibits.) The Food and Nutrition materials are to be published before or during the Second Semester, 1969-70.

The outcomes as summarized in this report for the fiscal year June 1, 1968 through May 31, 1969, have made a contribution toward each of the operational objectives written in the Project contract. A brief resume of the contributions in relation to each objective follows:

1. To determine the basic structure of the curriculum to be planned for Indiana to include conceptual structure of Home Economics, grade placement, scope and sequence.

   a. A revised scope and sequence has been presented in working paper form to Home Economics State Supervisory Staff, the Home Economics Advisory Committee and the home economics educators at each of the four State institutions. Further revisions have then been made on the exhibit copy.

   b. This scope and sequence has been designed so that yearly comprehensive courses can be retained or so that the curriculum can be channeled into depth semester courses.

   c. Tentative plans have been made by a Task Force Committee from the total home Economics Advisory Committee for a curriculum structure designed to include a one-year core course followed by elective depth semester courses. This plan is anticipated as being operative for the 1970-71 school year.

2. To determine the procedure for involving personnel throughout the state in curriculum development to include:

   State Vocational Staff Members
   University Staff Members
   Home Economics Teachers
   Pupils in Indiana Schools

   a. A System Analysis for Home Economics Curriculum Development in Indiana has been presented, evaluated, and revised. The final draft has been accepted and printed.

   b. A State Home Economics Advisory Committee has been appointed and has functioned well.

3. To set up long range plans for continuing curriculum development and revision.

   a. The System Analysis includes provision for establishment of priorities and time schedules for curriculum development.

   b. The organization during this year indicates that the System will be workable.

4. To establish priority of need for development of curriculum materials.

   a. Priority of need for 1968-69 was established for up-dating and revising materials for existing home making programs. Particular emphasis has been given to consumer education and to management as a central core of consumer education.

   b. The input from the elementary schools has been determined as relevant and has been surveyed.

5. To establish procedures for the development of curriculum materials.

   a. The System Analysis provides for the development of curriculum materials.

   b. The System Analysis provides for coordination between the State Supervisory Staff and the curriculum development group.

6. To prepare working papers for a segment of the curriculum in view of the decisions made in response to the above objectives.

   a. Proposed conceptual structures with a re-focus on management as a broad interpretation of consumer education have been presented in working paper form for Textiles and Clothing, a segment of Art in Home Economics, Housing, and Management.

   b. A public relations brochure for consumer and homemaking teachers with potential as career orientation curriculum material has been developed.

   c. The elementary curriculum survey checklist was made available to all vocational teachers during the 1969 Summer Vocational Conference.

   d. Commitments have been made for preparation of a conceptual structure in working paper form for Food and Nutrition.

   e. Workshops for curriculum development in the areas of Housing and Management were conducted at Purdue University during the Summer of 1969.

7. To establish procedures for the trial use of the materials developed.

   a. The System Analysis provides for the trial use of curriculum materials.

   b. For each working paper format, an evaluation form has been prepared. The volunteer teachers and teacher educators have been and are participating in the evaluation of the proposed materials.

   c. County study groups have been utilized as materials were made available.

   d. The results of the evaluation forms were tabulated and made available to those groups developing curriculum materials during the summer of 1969.

8. To establish procedures for the evaluation and revision of the working materials.

   a. The System Analysis provides for evaluation and revision of materials.

   b. Procedures for evaluation and revision have been combined with materials development during the fiscal year 1969.

   c. A two-part evaluation of the Resource Guide for Human Development and the Family, distributed in 1968, has been completed.

The focus during August was primarily on the completion of materials for the 1969 Summer Vocational Conference. Recommendations for revisions in the proposed scope and sequence for the Indiana vocational home economics program were presented to the State Staff in July. The State Staff made further revisions in this structure and reprinted the form for distribution at the Conference.

The written report of the survey of home economics concepts being taught in the elementary schools has been completed and is ready for final typing. No specific plans have been made for the distribution of the report; however, the findings reflect a situation of which all home economics teachers should be cognizant. Therefore, consideration is being given to preparing an article for publication using the information from this study.

The slide series was completed as a part of the presentation of the elementary curriculum survey for the Conference showing children involved in educational experiences illustrative of home economics conceptual learning.

Additional time has been devoted to the additions and revisions needed in the conceptual framework for clothing, textiles, and related arts. This task is not completed; therefore, no exhibit is included with this report.

The immediate procedural steps for the current year of operation have been established cooperatively by the Coordinator and the Consultant.

The achievements of the developmental phase of the project include the completion of the tabulations from the working papers in the form of a conceptual structure for clothing and textiles; evaluation of the scope and sequence and the subject area segments; and the tabulation of the elementary survey. Preparation for presentation of the elementary project at the August conference was made.

The preparation of the Elementary Survey Presentation included making and selecting slides, preparing audio-tapes, and finalizing commentary and conclusions to be made. It also included some revision of the questionnaire to be distributed to teachers for their personal use in conducting a similar survey in each local situation.

The Curriculum Coordinator, members of the State Supervisory Staff, and Purdue faculty directing the Management workshop held at Purdue participated in a meeting relative to the workshop.

The achievements of the in-service phase of the project included work toward finalizing plans for the in-service training to be given during the August conference. Proposed revision of parts of the Home Economics Handbook were made. Decision to withhold further revision was made until teachers had reacted to proposed scope and sequence presented at the summer conference, and decisions regarding a core-curriculum and the probable program for 1970-71 were made.

A tentative form for presenting the proposed scope and sequence was prepared. Ways of interpreting the "core and satellite" concept as a possible structure for 1970-71 were studied. Preparation for presentations at the summer conference were completed.

INDIANA RESEARCH COORDINATING UNIT
PROJECT NUMBER 102

FEDERAL GRANT #3-6-062717-2144

PROGRAM DESIGNED TO PREPARE STUDY MATERIALS AND CURRICULUM GUIDES FOR VOCATIONAL AGRICULTURE TEACHERS TO USE IN PROMOTING AN INTEREST IN THE FIELD OF FORESTRY

Coordinator:
Dr. Luther Hilterbrand

Purpose:

Due to the expanding need for innovative programs in agriculture education, new avenues to reach the students with vocational programs that will interest them in worthwhile endeavors for employment are necessary. One area which is recognized as very important to the state of Indiana is material resources. Many job opportunities for gainful employment exist for people who are interested and trained in this particular area.

Recognizing the need for course and study materials to augment curriculum studies, guides and materials in the area of forestry. This project was developed to fulfill that need.

A course of study materials was developed for use by teachers of vocational agriculture and others. The materials were used by a select group of teacher-consultants as a pilot project through the school year.

Periodic evaluation of the materials were made. At the completion of this phase the materials were evaluated put together in booklet form and disseminated to teachers.

The purpose of this course in forestry is to serve as a guide for providing learning experiences geared to the preparation of students to enter jobs in forestry occupations. Both the content and length as well as the associated occupational experience program may be modified to meet the needs of the individuals.

The course was designed as a core for suggested lessons for a course in forestry conducted by the Vocational Agriculture District. It may vary in length in presentation depending upon the teacher. Selected modules may be taken from the course and be taught in the sequence decided upon by the teacher.

On the basis of the success of this study, it is recommended that further projects be developed on conservation and wildlife.

INDIANA RESEARCH COORDINATING UNIT

Project Number 103

Grant Number 3-6-062717-2144

SUMMARY - VIP RESEARCH PROJECT
June 13, 1968 - June 30, 1969

On June 14. 1968 work was started on a list of all senior advanced drafting, electricity-electronics, and mechanics students scheduled for 1968-69 school year. We contacted the instructors in these areas for recommendations of advanced students for the VIP program. 24 boys were recommended but of the 24 boys recommended, 7 lacked credits or needed required credits and were, therefore, unable to participate in the VIP project.

A meeting was held with the boys and a brief summary of the proposed program was presented and the boys completed an application for VIP program. (Appendix) 4 boys decided they were not interested and we tentatively planned on 13. The three teachers who will work with the boys are: Donald Giles, Mechanics; Robert Johnson, Electricity-Electronics, and Jack Renner, Drafting. The summer of 1968 was a busy time in placing as many of the students as possible. In August, Mrs. Ruth Connolly was employed as Research Secretary.

The trainees during 1968-69 are listed below along with their occupation and training station:

John Akers	Drafting	New Castle Products
Mike Bogue	Mechanics	McClain's Greenhouse
Harold Godsey	Drafting	New Castle Surveyor's Office
Emery Griffith	Drafting	New Castle Products
Tim Hill	Mechanics	Herman J. Redd Motor Sales

Trainees (Con't.)

Phillip Inman	Drafting	New Castle Products
David McDaniels	Mechanics	Ramsey Auto Sales
Hugh Shelley	Mechanics	Dennis Equipment
John Springhart	Drafting	New Castle Products
Danny Walls	Electricity	Reed Electrical Supply

The following people were asked and served on an Evaluation-Advisory Committee:

Mr. Lloyd Moser, Chrmn.	Manager, Ind. Employment Security Div.
Mr. Jerry Barr	Area Manager, Public Service of Indiana
Mr. Gene Brown	President, Office Union, Perfect Circle Corp.
Mr. Tom Garrison	State Assistant Director of Voc. Ed.
Mr. Charles Good	Chief Engineer, New Castle Products
Mr. William Lehr	Principal, Walter P. Chrysler High School
Dr. Donald Turchan	Superintendent, New Castle Community Schools
Mr. Kenneth Brammer	Voc. Director, Walter P. Chrysler High School
Beverly Hankenhoff, Secy.	Coordinator VIP

The first meeting of the Advisory Committee met on September 25, 1968. At that time the functions and Duties of an advisory committee were given and discussed. They are as listed on next page.

The Advisory Committee met each month during the school year and were most helpful with their ideas and suggestions. Items discussed included: (1) The Labor Law and Workmen's Compensation as it pertained to co-op students; (2) a union member be on the advisory committee; (3) a report of the student's evaluation of the program (consensus of opinion was that they has learned a lot of intangibles other than their actual work and that the money they had earned was of secondary importance; (4) what islimiting our VIP project--lack of students; (5) what is the problem accepting co-op students as apprentices in electrician unions, etc. and; (6) a discussion of the Developmental Plan for the Vocational Industrial Program for the year 1969-70 - (Appendix)

In September many conferences were held with the trainees as well as with the cooperative team teachers, and team teachers visited training stations with coordinator. The first four weeks of school such things as vocational education, orientation, student responsibilities, aclub activities and human relations were discussed in the conferences. A VICA club was also organized and officers elected.

For the first grading period in November interviews with all employers were held. The rating sheet which they are to fill out for each trainee (Appendix) was explained and is a part of their grade for the first nine weeks. All employers are well satisfied with the students progress and are doing well in their studies and training stations. Rating sheets were made out for students who were employed four weeks or more and the breakdown is as follows on the employer ratings:

Training Station	Class Grades
1 - A	1 - B-
2 - B's	2 - C+'s
1 - B-	4 - C's
2 - C+'s	2 - D+'s
1 - C	2 - D's

As of December 30, the boys have worked a total of 2,964-3/4 hours.

As early as January conferences were held with the team teachers and prospective students for next year on orientation to the VIP program. Along with Mr. Giles met with all mechanics supervisors at their training stations, also checked with employers on progress of training students. Again all reported students were doing well.

The following grades were earned by the students for the 2nd nine weeks:

Training station	Class	Semester averages.
1 - A	1 - B	1 - B-
1 - B	1 - B-	3 - C+
2 - B-	2 - C+	2 - C
3 - C+	2 - C	3 - C-
1 - C	2 - C-	1 - D
	2 - D	

In April the Developmental Plan for The Vocational Industrial Program for 1969-70 was submitted to RCU.

The boys that were interested went on a study trip to Chicago on April 1, 1968 during spring vacation. Also several boys went to Lincoln Tech with Mr. Giles.

Rating sheets were made out for the 3rd nine weeks and class grades and employer ratings are as follows:

Training Station	Class
1 - A	1 - B-
2 - B's	2 - C+'s
1 - B-	4 - C's
2 - C+'s	2 - D+'s
1 - C	2 - D's

Two Phoenix releases are attached (Appendix)

In May a Training Station Evaluation form was sent to All Employers and a summary follows of their comments: (1) very beneficial to student; (2) beneficial to employer; (3) start vocational training earlier; (4) changes noted in trainee -- more skilled in handling of tools and in social behavior; (5) help fill badly needed jobs in skilled labor market; (6) training in additional areas needed; (7) Attitudes improved very much in fitting their part-time schedules in with full time employees; and, (8) skills were as good or better than most new employees with same education. In fact their desire to learn was greater.

The VIP Employer-Employee Banquet was held in May (program and pictures attached and copy of certificate of appreciation). The boys planned the banquet, sent the invitations and did most of the work in getting ready for the banquet. Each boy who had a part in the program of the banquet did very well and we were very proud of their performance. The employers and guests enjoyed the good food and fellowship and seemed to be as proud of the boys as we were.

We feel that the first year of the VIP project was a success. Teachers and employers alike have commented on the progress the boys made during the school year 1968-69 both as to their work at school and training stations and their progress in social behavior (We are looking forward to next year and plan for an increase in number of students and expanding the work areas.)

In May met with potential students for 1969-70 and metals and welding areas will be added to program. Twenty boys have indicated desire to enter program and completed (blue form) (copy attached).

INDIANA RESEARCH COORDINATING UNIT
PROJECT NUMBER 104

GRANT NUMBER 3-6-062717-2144

CAREER GUIDANCE EDUCATION COMMUNICATION PROJECT

Coordinator:
Elizabeth Good
Franklin Township

Purpose:

The Education Communication project has been able to produce six one-minute color films designed for the purpose stated in the project. These films are in the process of being used at various functions, displays, etc., in order to gain further ideas for development. Films are available for viewing on a "borrowed" basis only because of the extreme cost of production. Request for viewing films should be made to Franklin Township Community School.

Among the more significant contributions of the planning program were:

1. A universal belief that such a program would be more than just an asset to vocational education but could eventually be the life-blood for all of vocational education.
2. Presentations that were made before all groups around the nation excited a desire for a large number of such Education Communication prints be developed and developed in such a manner that the Education Communication project be made available to all citizens of the nation with a minimum of changes in the tail so that each state may give direction on where to receive information concerning vocational education programs.
3. Members of the U.S. Department of Health, Education, and Welfare, Office of Education have received copies of film produced.
4. Two films, one on Horticulture and one in Automotive Mechanics, were produced for viewing and audience reaction.

5. Much research was carried out in order to support the Education Communication project, to collect data as to the availability of information that can be disseminated through the TV medium as well as educational material to be mailed to people who will respond to the Education Communication.

As one can see, many changes were made from the original plan of Education Communication. The first intention was to "cut" cost in any manner and produce these films for a very minimum of cost. It soon became apparent that to produce the quality that was desired that changes would be necessary. Therefore, only two were produced and used throughout the year. These two films were used approximately 25 times each with an average audience of 20 per showing with presentations ranging from a few locally interested persons to a large number of vocational educators from across the nation.

Operation Phase I, 1969

The expansion of Education Communication through the Fiscal Year 1969 included the mapping of five (5) films to include Distributive Education, Business and Office Education, Trade and Industrial Education, Occupational Phase of Home Economics, and Health Occupations at the secondary level. Upon completion of these films, a total package of six (6), these five plus one already prepared in Horticulture, will be available to present to selected TV stations around the State in order to try on a "trial and error" basis. If successful results are found (through people responding and seeking information about vocational education programs) then we will be able to enter Operational Phase II in 1970. Included in this year's (1969) program will be the addition of written material (brochures, etc.) concerning Education Communication, vocational education, and the world of work.

The objectives included in the original planning phase are still the same as well as the supplemental information supporting the philosophy of the Education Communication concept. We are incorporating the Research Coordinating Unit, Department of Public Instruction into Operational Phase I in order to assist us in assessing the Education Communication project. Assessment will include not only the evaluation of the selected areas presenting Education Communication but will also include an evaluation of the written material presented, the scripts, the films, and other items related to the entire project of Education Communication.

INDIANA RESEARCH COORDINATING UNIT

Project Number 105

Grant Number 3-6-062717-2144

Coordinators:

Raymond Hay
Kenneth Brashaber

RUSHVILLE CONSOLIDATED HIGH SCHOOL VOCATIONAL PILOT PROGRAM

The Rushville Vocational Pilot Program was started in January, 1967. The intent and purpose of the program was to provide vocational experiences to our high school students who were not making plans to further their education beyond the high school level. Our plan was to provide actual work experiences for these students after they had completed at least one semester of preparatory classroom work. Seniors only were admitted to the cooperative work experiences after a suitable pre co-op classroom semester.

We wanted to involve as many areas of our school as we possibly could. We were aware that some departments would be less interested than others. so we dicided to provide such an experience to all departments by means of the pilot program. Students from the Industrial Education department; Home Economics; Agriculture and Business areas were invited to become a part of this program. As the participation from these departments was limited at first, it was not practical to employ a coordinator for each area. It was determined that Raymond N. Hay be designated as a coordinator for all areas. As each area grew, the area then could finally become independent of the pilot program and at that time provide its own coordinator.

Thirty-six students were involved in the pre co-op class in January of 1967 and the first class of students actually placed on the job totaled 11 students. Five were from the Business area; two, Home Ec.; two, Agriculture; and one, Industrial Education.

The following school year we place seven from the Business area; one, Home Ec.; five, Agriculture; and none from Industrial Education. The pre co-op class for the 1967-68 school year totaled sixteen students.

For the 1968-69 school year, it was felt that both the Agriculture area and the Business area had developed to the point where they could be independent and provide for their own coordinator. Kenneth Brashaber headed the Agriculture program and Richard Dragoo was charged with the same responsibility with the Business area. Raymond N. Hay was still responsible for stud students from the other departments. During that school year, 1968-69, it was felt that the remaining departments were not in a position to become self sufficient. The reason in most cases was not lack of student interest but failure of a faculty member from those departments feeling strongly enough in favor of the program to give up some of his instructional time to devote one-half time to the co-op program. This is not to say the teachers were not devoted. They were devoted to the teaching of their areas.

Looking back over the pilot program, we here at Rushville Consolidated High School feel that approximately 118 students benefitted directly from the program plus the students who are now able to participate through the Agriculture and Business areas. It would then appear that the pilot program has had lasting effects on our school.

We also feel good about the type individual the program has helped. We feel the program has special appeal to the average to below average academic student. In some cases we saw a student's attendance record go from 30 days absent to 5 days the following year. We will not immediately grab for all the glory and will never know for sure if we deserve any of the praise for this improved record. We, in our own minds, do feel we were responsible for some of this change. We feel the responsibility the students had to their employers caused them, at times, to evaluate themselves in a different light than they had done before.

During the second semester of the 1966-67 school year, Raymond N. Hay was working full time with the pilot program. Mr. Brashaber and Mrs. Phyllis Joyce both devoted one hour a day. The next school year the same teachers were involved and the following year, r. Dragoo was added one-half time and Mr. Vernon Fecher worked for one hour per day teaching a Sales class for students desiring to prepare for the co-op program.

I feel the real evaluation of such a program can best be made by the students involved and by the cooperating merchants. It was difficult at times to get all students placed in an area of their interest because the businessman was not always receptive to added costs in the form of wages. It was most gratifying, however, to work with such a person during the year and to share with them the enthusiasm and joy that comes from helping a young person develop and grow in a vocational area where he may continue for years. After a businessman experienced this cooperative feeling, it was not difficult to place a student with him the following year. The students were meeting in a class for one hour just prior to their departure for their work experience. During that time, lively discussions were held concerning what employers looked for in his employees and how the students could better make a good employee.

At the end of the year, a banquet was held. All advisory board members, cooperating merchants and vocational students and teachers were invited. The banquet plans were made by the students and they introduced members of their firms and parents to their group.

We also were pleased that a rather large number of students were hired as full-time employees upon graduation from the program. We feel the student students benefitted from this pilot program.

Over the two and one-half years of the program, our local school corporation provided approximately $12,000 for wages, supplies, travel, and educational materials for the program. We feel this has been justified and see a need to continue the Agriculture and Business areas of the program.

INDIANA RESEARCH COORDINATING UNIT

Project Number 106
Grant Number 3-6-062717-2144

AREA VOCATIONAL SCHOOL SURVEY
WARSAW, INDIANA

Purpose:

This project involved a feasibility study to determine the employment needs, student needs and possible location of area vocational schools conducted in a four-county area, the four counties involved are Fulton, Kosciusko, Marshall and Whitley. The feasibility study has been finalized and the results of this will be reproduced and distributed to the local area as well as the state and nation.

The organization for this project included a steering committee which was the governing body and consisted of the appointed representative of the various local school boards. The primary responsibility of the Steering Committee was to formulate the final plans for the implementation of the feasibility study. A Director was appointed and was responsible to the Steering Committee. There was also a liaison contact appointed in each local school corporation who would aid the Director in the collection of pertinent data concerning the local school organization and the local community. The sources of data would include service clubs, city and county planning commissions, U.S. Employment Service Division, area weekly and daily newspapers, public service companies, area business and industry contacts and students, teachers, principals and superintendents of the school corporations involved.

Some of the findings of this project included a population increase in these counties from 109,368 to 121,085 from 1959 to 1969, a questionnaire was sent out on adult interest in an area vocational school and 35% of the forms distributed were returned. (Table 14). Results of this survey showed that 89% of the parents responding believe that there is a definite need for an area vocational school, and of those responding, 38% expressed a desire to enroll in adult education classes (Table 13). A survey for opportunities for placement of graduates was developed in cooperation with the Indiana Employment Security Division of the Indiana State Employment Service and its branches located in South Bend, Fort Wayne, and Logansport, Indiana.

Results of this survey, (Table 15), indicates that the greatest need for workers is in the trade and industrial field. There is a definite shortage of skilled machine tool operators, welders, and skilled workers in the printing trades. There is also a demand for trained people in the health occupations, such as practical nurses and nurses aids. The needs for the four counties also indicates a demand for trained workers in the business and office area. A total of 2,324 jobs was projected as the estimate of opportunities that will be available in the four-county area in the next five years.

The financial condition of the schools participating in the feasibility study is very favorable. According to table 17, the assessed valuation of the two school corporations range from $7,839,880 to $58,545,520. The individual school assessed valuations support the contention that it is almost impossible from the economic standpoint for the individual schools to offer a good, comprehensive vocational program to meet the needs and desires of the students whom it will serve and to offer the wide diversity of course offerings that reflect as much as possible the needs of business and industry in the area in which they live.

For these reasons, an area school seems to be the most practical solution to the high cost that is involved in building, equipping, and maintaining vocational program.

TABLE 13

State of Indiana
Department of Public Instruction
Division of Vocational Education

AVS-X

Date April 1969

FORM OF SUMMARIZING ADULTS WHO DESIRE VOCATIONAL EDUCATION

Skill Desired	Number of Adults Desiring Training
1. Agriculture Education	107
2. Business & Office Education	270
3. Distrubutive Education	64
4. Health Occupations Education	115
5. Home Economics Education	112
6. Technical Education	91
7. Trade & Industrial Education	280
	1,039

TABLE 14

ADULT SURVEY

Location Area - KOSCIUSKO, MARSHALL, WHITLEY, FULTON

Distribution *
No. Distributed 3,347 No. Returned 1,172 35 %
No. of children represented in elementary school K- 8 1,281
No. of children represented in secondary school 9-12 1,742

Question #1
Do you believe there is a need for an area vocational-technical school?

Yes	1,011	Response	1,172	89 %
No	103	Response	1,172	9 %
Und.	28	Response	1,172	2 %

Question #2
If you have children, would you encourage them to enroll in courses in the area vocational school when they become juniors and seniors?

Yes	869	Response	1,172	76 %
No	214	Response	1,172	18 %
Und.	59	Response	1,172	6 %

Question #3
Would you be interested in attending evening classes conducted by the area vocational-technical school?

Yes	435	Response	1,172	38 %
No	608	Response	1,172	53 %
Und.	99	Response	1,172	9 %

Question #4
If answer to question 3 is yes, what courses from the list below would you be interested in attending?

	(No. Requests)		(No. Requests)
Auto Repair	49	Electronics	49
Auto Body Repair	15	Television and Radio Production	12
Machinist	35	Welding	63
Building Trades	46	Sheet Metal	10
Secretarial and Stenographic	90	Horticulture	24
Accounting and Recordkeeping	107	Floriculture	29
Data Processing	72	Landscaping and Lawn Care	44
Medical Assistant	53	Building Maintenance	17
Practical Nursing	61	Home Economics	42
Beautician	63	Heating and Air Condition	25
Technical Drafting	21	Printing	9
Commercial Art	41	Distributive Educ.-Retailing	20

Additional courses (See individual school corp.)

* Adult survey forms were given to each sophomore and junior student in each of the ten high schools. They were instructed to take them home to their parents for completion and to return them as quickly as possible.

TABLE 17

ASSESSED VALUATIONS AND SCHOOL TAX RATES OF PARTICIPATING SCHOOL CORPORATIONS

	Assessed Valuations	1969 School Tax Rates
Warsaw	$ 58,545,520	4.45
Lakeland	33,820,750	5.38
Columbia City	29,264,910	6.15 *
Whitco	17,842,090	5.23
Tri-Township	13,430,100	5.66
Argos	7,839,880	5.04
Bremen	15,563,000	4.31
Culver	19,267.115	5.27
Plymouth	28,044,680	4.66
Rochester	19,861,875	5.18
TOTAL	$ 243,479,920	

*Columbia Twp.	4.83
*Columbia City	6.15
*Etna-Troy Twp.	6.49
Jefferson Twp.	5.07
Thorncreek Twp.	5.94
Union Twp.	4.95
Washington Twp.	4.42

In preparing the feasibility study, one of the stipulations is:

> To be acceptable, the feasibility study and signed agreement must be representative of school districts in the area that accommodate at least 75% of the student population and a minimum of $ 150,000,000 of assessed evaluation.

INDIANA RESEARCH COORDINATING UNIT
PROJECT NUMBER 107

FEDERAL GRANT #3-6-062717-2144

Vocational Career Guidance Center "VIEW"

Coordinator:

Walter H. Cox, Director
Public Personnel Services
North Lawrence Community Schools

Purpose:

A complex and rapidly changing economy requires increased availability of vocational counseling of the highest caliber. It is a well accepted fact that even professionally trained counselors find themselves inadequate inkknowledge of current occupational information and economic trends.

To establish a pilot career guidance center for the collection, synthesis and dissemination of vocational information for use by schoo schools in the State of Indiana. It is intended that this project will begin with a few participating schools, but eventually develop into a state-wide program.

An assessment of entry occupations in the immediate area was completed and VIEW scripts on approximately forty entry occupations have been identified. All of the major and most of the minor employers from this area were visited and are cooperating and lending support to the VIEW project.

Project VIEW was a pilot project established by the San Diego Regional Career Information Center. It was determined that for the purpose of this project a four-page format with one aperture card would be the most effective method to achieve the goals.

Individual schools have neither the personnel nor the budget for the needed periodic studies of local and regional trends and current career opportunities basic to realistic career planning. Further, the availability from a multiplicity of sources of technical data on current economic status or predicted economic trends and specific information on the occupations of a particular locality in no way guarantees that their information will be assimilated and used by counselors and others.

The basic problem was to develop a system for Indiana schools to collect, convert and translate, when necessary, available economic and career information and to disseminate their material to counselor and other interested personnel.

Economic and career information materials will be collected from other VIEW projects and the Indiana Department of Employment, Department of Labor, commercial publishers, and industrial and business firms. This material was reviewed, abstracted, and completed. Microfilm copies of this material was prepared on aperture cards, a filing system was developed so that the prepaid material will be readily available to personnel in the schools in the form of aperture cards or printed copy.

The services provided by this center are primarily vocational guidance and counseling services designed to: (1) provide counselors and other school personnel with information necessary for realistic a career planning, and (2) provide training experiences for counselors and others who are responsible for guidance and placement of students. Our goal is to enable counselors to become more effective in the use of existing materials and to keep abreast of the rapid changes in the world of work which have bearing upon appropriate career planning and educational commitment.

INDIANA RESEARCH COORDINATING UNIT
PROJECT NUMBER 108

FEDERAL GRANT 3-6-062717-2144

AREA VOCATIONAL SCHOOL SURVEY
LOGANSPORT, INDIANA

Coordinator:
Don Grostefon

Purpose:

The project was developed because the superintendent of schools and the boards of school trustees of the eight counties included in the proposal, Benton, Cass, Carroll, Fulton, Howard, Jasper, Pulaski and White, were aware that curriculum innovations generally are directed toward the college bound pupil and realized the need to provide an extended and adequate program of educational opportunity, related services and skill training for those pupils within the area who terminate their educational programs either before or with high school graduation, organized together in a joint cooperative venture for the purpose of developing a survey to determine the feasibility of an area Vocational School to serve the youth of the total cooperative school area and to provide extended and continuous job training and retraining for the adult population in the area to be served.

The survey accomplished the following:

1. Determined the number of pupils who terminated their education with graduation or before graduation.
2. Determined the interests, needs and abilities of these pupils.
3. Determined the interests of the total community concerning the area Vocational School.
4. Surveyed the employment opportunities within and adjacent to the area.
5. Determined the attitudes of business and industry within and adjacent to the area toward the opportunity of skill and job training for pupils within the area.
6. Surveyed the need for continuous job training and retraining among the adults within the area.

The organizational structure of the survey committee was devised by the active participants-the Superintendents of each of the participating school corporations. In some cases, the Superintendent or Assistant Superintendent worked with the Survey Director in gathering data; however, in most instances this job was delegated to the principal or Guidance Director.

Each coordinator has been released from his other duties a portion of the school day to work on the survey. The Survey Director guided and directed the activities of the school coordinator.

Many sources of information were explored, area weekly and daily newspapers, service groups, fraternal organizations, public service companies, area businesses, county planning commissions, statistics of other recent surveys, area radio stations, teachers, principals, and superintendents of the school corporations involved.

INDIANA RESEARCH COORDINATING UNIT
PROJECT NUMBER 109

GRANT NUMBER 3-6-062717-2144

A PROJECT TO DEVELOP, UNIFY AND STRENGTHEN TEACHING AND CURRICULUM MATERIALS IN VOCATIONAL TRADE, INDUSTRIAL AND TECHNICAL EDUCATION

Coordinator:

Mr. Howard Turner, Vocational Director
Vigo County Schools, Terre Haute, Indiana

Purpose:

This curriculum development project sponsored by the Vigo County School Corporation in cooperation with the Office of the State Superintendent of Public Instruction and the Indiana Research Coordinating Unit has been an effective project in trade and industrial curriculum development.

Demonstrated progress, particularly in the machine trades area is supported by the materials that accompany this report. A great variety of curriculum material is being used by classroom teachers with success but without regard to unity in the various programs throughout the state. Most trade, industrial and technical curriculum guides were produced in the late 1950's and early 1960's and have remained static since that time. With the rapid growth of industrial needs in all fields as well as advances in personal service occupations, curriculum guides and teaching materials have not kept pace; therefore, this project reviewed, revised and in general updated and developed into a usable form of curriculum materials of several areas of Vocational Trade and Industrial Education.

Concentrated effort by experienced Vocational Education specialists is necessary to make meaningful progress in curriculum development. Involvement of Vocational teachers, industry advisory people and curriculum specialists is fundamental to the success of this project.

A committee for machine trades area was developed at the beginning of the project year. As the year progressed, other committees started to form. The machine trades committee consisted of machine shop instructors from all parts of the state. After the committee had begun making progress in the development of curriculum for the machine trades, it was decided that it would be necessary to divide the state into regions to enable more machine shop instructors to participate in the curriculum development. Therefore, the state was divided into thirteen (13) regions with one individual from each region to be on the state committee. The representative to the state committee would be the chairman from his specific region.

As material was developed it was sent to the state committee for an evaluation. If the material received a negative evaluation, it would then be sent back to the regional committee for improvements and changes. If the material received a positive evaluation, it was then sent to the Instructional Materials Laboratory at Indiana State University for reproduction and distribution to all machine shop instructors throughout the state. As the instructors used the material they would make revisions and/or corrections for the betterment of the material. After which, the material would be resubmitted to the state committee with their suggestions for changing that part of the material. The committee would then evaluate these changes and if they were valid the material would be revised and sent back to the Instructional Materials Laboratory at Indiana State University for reprinting and distribution. Once this material had received final approval by the state committee it was then bound into printed curriculum guides.

INDIANA RESEARCH COORDINATING UNIT
PROJECT NUMBER 110

GRANT NUMBER 3-6-062717-2144

TRADE, INDUSTRIAL AND TECHNICAL YOUTH CLUB LEADERSHIP

Coordinator:
Francis Morrison
Upper Wabash Area Vocational School

Purpose:

To develop guidelines and procedures that would be utilized in the administration, promotion and upgrading of youth clubs affiliated with Trade, Industrial, and Technical Education and similar youth groups appertaining to therein. Indiana has a potential capacity because of lack of organized materials and necessary training aids to facilitate the inception of club activities in the regular curriculum as an integral learning situation.

To develop youth leadership materials that may foster and enhance learning experiences and will promote the continuity and growth of club work by better trained leaders.

The youth club associated with Trade, Industrial and Technical Education is new in terms of other disciplines and in terms of numbers of students is potentially the greatest growth pattern in Vocational Education. Therefore, it is proposed further to design and carry out on a trial basis activities for the purpose of furthering leadership abilities that will meet this growing need.

Organization meetings were held and ideas offered with selected procedures to be followed to carry out this proposal. Recommendations were made to select equipment to be used in facilitating this project and lines of communication planned.

It was determined that a handbook for student officers should be prepared and made available to each club officer. The original order called for two thousand copies to be printed at Upper Wabash Vocational School and disseminated to local clubs. This was carried out and has proven to be of great assistance to development of club leadership.

It was further determined that a representative of Indiana Vocational Trade, Industrial and Technical Education youth clubs be funded to attend nationally called meetings in order to incorporate the ideas and thinking of those in similar statewide roles that would be of value in Indiana programs. It was determined that the state vice advisor would attend a meeting in Washington D.C. for state advisors and the American Vocational Association meeting in Dallas, Texas that sponsored a section for Trade, Industrial and Technical youth club leaders.

The information that was gained at these meetings was especially helpful in providing information that greatly helped Indiana to develop the many competitive activities and leadership development training. At these meetings new materials were developed that would aid state and local youth groups to develop their programs and enhance the participation of activities that were designed to build prestige and interest in leadership and skill areas that would subsequently add future employees to badly needed skill areas.

The drawbacks that were encountered were:

1. Time needed to develop materials
    a. Those associated with this project were in positions that required their full consideration and they were limited in finding the necessary time to write research, and develop needed materials.
    b. Difficulty in bringing student leaders together from various sections of the state due to distance, working schedules and supervision.

The funds and energy expended in this project were well spent. This added materials, ideas, and inspiration that helped to establish a good working foundation that has certainly benefited the state clubs and will add to the growth of Vocational, Industrial and Technical youth club activities in the future.

It is recommended that this project be extended and rewritten to provide a better understanding and to help fill the needs that exist.

INDIANA RESEARCH COORDINATING UNIT
PROJECT NUMBER 111

GRANT NUMBER 3-6-062717-2144

APPLICATION FOR APPROVAL OF AN EXPERIMENTAL PROGRAM OF VOCATIONAL EDUCATION

Coordinator:
Mr. Carl Vinyard

Purpose:

I. This project was to conduct an inter-disciplinary pilot program in occupational training within the disciplines of Home Economics, Agriculture, Business, and Trades and Industry at the South Newton Jr.-Sr. High School, Kentland, Indiana.

II. The Vocational Agriculture Department at South Newton for two years has had a program in Vocational Agriculture Sales and Service and Mechanics Occupational Training. So that more students may benefit from a work experience program we would like to include students from the disciplines of Business, Home Economics, Agriculture and Trades and Industry.

The Major role of Vocational Education has been to assist youth and adults to prepare for the world of work. Because of social economic changes in the world of work the responsibility for providing training that is a salable skill rests with vocational education. The amount of training needed for men is changing. Also a greater percentage of women will work outside the home which will require training for wage earning.

In order to solve these problems we proposed these four major concepts.

Some behavorial objectives for this course were:

1. Understanding the changing economy, the social factors and the family values and goals that affect the individual's responsibility and competence in the world of work.

2. Utilization of human and material resources essential to achieving personal satisfaction and success in employment.

3. Understanding of the essentialities of employment in relation to the individual's potential growth, and effective use of his abilities.

4. Development of the individual's values, goals, abilities and personal habits for achieving satisfaction and competence in the world of work.

5. Development of effective mental, social and manipulative skills as a means to adequate and satisfying living in a democratic society.

III. Method of Approval

A. Selection of Students

1. Requirements for admission to the vocational occupational program.
   A Student-

   a. Should be 16 years of age or older and as mature as possible
   b. Should be a junior or senior
   c. Should be physically fit
   d. Should have a good attendance record
   e. Should have his required credits up-to-date so that he can graduate with his class.
   f. Should be a good "citizen"around the school
   g. Should make a good personal appearance
   h. Should have made satisfactorily success in high school subjects
   i. Should have an interest in training for a career in the field of vocational training
   j. Should benefit from the training and from work experiences

2. Some reasons why it was necessary to reject some applicants.

   a. Those interested in "spending money"
   b. Those wanting to get out of school early
   c. Those physically unfit
   d. Those who participated in too many extra-curricular activities
   e. Those who were emotionally immature
   f. Those whose conduct in school was not what it should have been
   g. Those who had low moral standards
   h. Those who were the wrong age or the wrong sex for available occupations

B. Scheduling

Juniors- Enrollees in the pre-cooperative class participated in one class period per day devoted to the related class experience. In addition, the student schedule necessarily included courses that served as pre-requisites to graduation.

Seniors- Students were scheduled by counselors so that they had one period of related instruction and two periods for the work experience program.

Students in the intensive training program had one period per day for their training experience program.

C. Grading and Evaluation of Students

Grades were determined by the instructor in the related courses.

For students on-the-job, the student's supervisor at the training station checked the form provided by the teacher coordinator. A copy is enclosed.

The students evaluated themselves.

The student's final grade was an average of the student's evaluation, the teacher-coordinator's evaluation, and the training station evaluation.

INDIANA RESEARCH COORDINATING UNIT
PROJECT NUMBER 112

GRANT NUMBER 3-6-062717-2144

A COOPERATIVE EFFORT TO DEVELOP AN IN-DEPTH COURSE OF STUDY FOR TRAINING PERSONNEL FOR SCHOOL FOOD SERVICES

Coordinator:

Mrs. Sheila H. Elam, Nutrition Consultant
The Indiana School Lunch Division
State House - Room 401
Indianapolis, Indiana

Purpose:

The intent of the project was to develop a state-wide in-service Training Program for School Lunch Personnel

The cooperative effort involved the Director of the School Lunch Division, the Nutrition Consultant to the School Lunch Division, the Assistant Nutritionist, the Director of Adult Education in Vocational Education, and the Director of Food Services at the School Corporation chosen to execute the Pilot Program.

The need for in-depth training of School Lunch Personnel is evidenced in a number of ways. The School superintendents are tempted to turn over the entire program to vending machine companies. The Blueprint for training of School Lunch Personnel provides an alternative, i.e., to recruit and train personnel specifically for School Food Service Programs.

The purpose of the School Lunch Program is two-fold-nutrition education via nutritionally balanced meals and non-profit operation. Trained personnel are needed in each instance to plan, prepare, and execute this program.

The need for competent personnel in School Lunch precipitated the work on this project. Of all problems related to School Food Service, the one most vital is lack of competent personnel to operate the School Food Service Program.

The phenominal growth of School Lunch Programs as well as Breakfast and the other programs administered by the U.S.D.A. has not been accomplished without problems. In each instance competent personnel would have aided in the solution of same.

Among the problems most often being resolved include rising costs of food and labor, necessary planning for more equipment, satellite food service, and centralized purchasing. The problem remains "Where can the Superintendent get Trained personnel for School Lunch?" A partial solution is to train the present personnel. Guidelines for the solution are hopefully included in the bulletin "Blueprint for the Training of Personnel in the School Lunch Program."

General Objectives of a School Lunch Training Program include:

1. To attract new personnel for employment in School Food Service Programs.

2. To pursue in-depth programs at all levels of knowledge, skill, and efficiency.

3. To emphasize School Food Service Programs as an integral part of the total educational program.

4. To raise the educational, skill, and knowledge levels in such ways as to increase the self-worth of the employees.

The Specific objectives include training and knowledge in basic areas vital to School Food Service Programs such as:

Nutrition
Menu Planning
Food Storage
Management (including Recordkeeping)
Food Preparation
Sanitation
Quantity Cooking

A pilot program for the Proposed Personnel Training Program resulted from a meeting held in August of 1967. In attendance were the Director Adult Education in the Division of Vocational Education; the Assistant Supervisor of Home Economics; State Nutrition Consultant; two Directors from Food Service in local communities.

The criteria for the proposed program of study were developed. In each case the emphasis in course content would be placed on its relation to School Food Service Programs.

Two pilot-type courses were taught in the State, each of which was a lecture-type course and the students were encouraged and required to build and keep working notebooks on the material presented.

The evaluation of these courses was of necessity subjective since no precourse nor post-course examinations were given. The participants generally agreed they were of greater value to the School Food Service Programs as well as to their communities. Basic Principles of Nutrition often became the basis for a grocery list at home.

In-depth training of School Food Service Personnel may be the tool which will prevent total absorption of school lunch by food management companies and other profit-motivated concerns perpetuating mass feeding operations. The Blueprint for Training of School Food Service Personnel may provide the School Administrator with the key to preservation of applied nutrition education and total return of food value for monies spent by each child in School Lunch.

INDIANA RESEARCH COORDINATING UNIT

Project Number 113

INSTRUCTIONAL MATERIAL CENTER

Grant Number 3-6-062717-2144

CoordinatorL
Mr. Tom Eachus
Indiana State University
Terre Haute, Indiana

Purpose:

This project is concerned with the reproduction and dissemination of reports, booklets, curriculum guides and teaching materials developed by the RCU staff and RCU projects. All project reports are made available through the Instructional Material Center to all people requesting reports.

The following publications were printed in quantities for dissemination by the Vocational Instructional Materials Laboratory, Indiana State University under their project;

1. *Vigo County Curriculum Project*
   Indiana Project Number 109

2. Systems Analysis, Home Economics
   Indiana Project Number 101

Supply and resource materials

1000 copies of IHEA Project
Art in Home Economics

700 copies of Curriculum Guidelines

1500 copies of System Analysis for Home Economics
Curriculum Development in Indiana (Chart and Interpretation)

900 copies of Proposal Scope and Sequence for Indiana

200 copies of Clothing, Textiles,and Related Arts

3500 copies of Advisory Committees for Home Economics

3500 copies of Adult Education in the Home Economics Program

500 copies of Home Economics Related Occupations Training

2000 copies of Vocational Education Facilities

500 copies of Vocational Guidance Manual

1500 copies of Vocational Guidance Manual

500 copies of Vocational Guidance Seminar

500 copies of A Care Curriculum in Vocational Agriculture I

500 copies of A Care Curriculum in Vocational Agriculture II

125 copies of Final Report - A Care Curriculum in Vocational Agriculture I and II

INDIANA RESEARCH COORDINATING UNIT

Project Number 114

Grant Number 3-6-062717-2144

Material and Information - Dissemination Project

Coordinator:
Walter Penrod

The purpose of this project is to convey to interested citizens basic fundamental understanding and support for a comprehensive vocational education project within the state.

Prior to the establishment of the research coordinating unit little, insufficient, drab reports on the activities of Vocational Education were available. This project involved the development of an annual report that would explain and gain the support of both lay citizens and the professional educator. The project involved the securing of professional assistance, along with the professional state staff to develop, prepare and have printed a dynamic annual report. As asresult a number of benefits have been derived for Vocational Education throughout Indiana.

Some of these might be listed:

1. Broader understanding of how and why funds for Vocational Education were expended.
2. Broader understanding of the various fields of Vocational Education.
3. The varied procedures in attaining vocational compencies of students.
4. An added respect of future students and increased support by lay citizens and tax payers for Vocational Education in the State of Indiana.

INDIANA RESEARCH COORDINATING UNIT
PROJECT NUMBER 115

FEDERAL GRANT 3-6-062717-2144

DEVELOPMENT OF A REFERENCE CORE FOR THE VOCATIONAL AGRICULTURE I AND II CORE CURRICULUM

Coordinator:
Dr. William H. Hamilton
Agriculture Education
Purdue University

Purpose:

An increasing amount of attention in Indiana is being focused on vocational education. The increasing use of specialized programs in agriculture and the development of area vocational schools containing these programs emphasized the values of a core or base of education on which to build these specialized programs.

Traditionally we have held the local situation should dictate the course of study to be pursued. While we are unwilling to abandon this position completely, we believe modern agriculture is more consistent over a wide area than was true a generation ago. As a result, a number of benefits can be derived from some degree of uniformity in basic agriculture science taught in the high school.

This project was conceived with these goals in mind:

1. Help local schools respond to trends and needs created by changes in agriculture occupations.
2. Revised occupational goal training in line with PL 88-210.
3. Provide a two thirds core for Vocational Agriculture I and II with lesson plans for each lesson title in the core.
4. Have these lessons reviewed by a panel of consultants and prepared for printing and distribution to vocational agriculture teachers.

The method of development of the lesson plans has been to call a group of teachers together to set up the core of lesson titles and later to review the lessons planned and make recommendations concerning the lessons.

Three meetings of the panel of consultants were held. At the first the list of lesson titles was adopted and a few lessons examined and a lesson format adopted. At the second meeting of the panel the lessons in all areas except economics and farm mechanics were reviewed. At the third meeting of the panel the agriculture mechanics and economics lessons were reviewed.

The lesson planner gathered typical reference materials used in local vocational departments and then developed plans making use of these materials as sources. The completed group of lessons appear as the appendix of this report.

The completed lessons were prepared for printing on a loose-leaf basis. This was designed to build in the greatest possible amount of flexibility for their use by local teachers.

In order to prevent the lesson plans from being dust gathering items instead of useful tools to the teachers, distribution was made only on special request or on the basis of teachers' attendance at one of a series of meetings designed to present and explain the lessons to the teachers.

A total of 64 lessons were planned for a two thirds core for Vocational Agriculture I, and 47 lessons were planned for a two thirds core for Vocational Agriculture II. Of these lessons in Vocational Agriculture I, 3 titles were in introduction and orientation, 13 titles were in the Future Farmers of America module, 7 titles were in agricultural experience programs, 1 in agricultural career opportunities, 14 in agricultural mechanics, 9 in animal science, 7 in soil science, and 10 in plant science. This breakdown of the number of lesson titles in each module is shown in Talbe I. Table II shows the same type of breakdown for the Agriculture II core.

TABLE I.

MODULES AND LESSONS IN THE AGRICULTURE I CORE

Module	No. of Lessons	Recommended Hours
A. Introduction and Orientation	3	2
B. Future Farmers of America	13	26
C. Agricultural Experience Programs	7	15
D. Agricultural Career Opportunities	1	2
E. Agricultural Mechanics	14	46
F. Animal Science	9	15
G. Soil Science	7	10
H. Plant Science	10	10
TOTAL	64	120

TABLE II.

MODULES AND LESSONS IN THE AGRICULTURE II CORE

	Module	No. of Lessons	Recommended Hours
C.	Agricultural Experience Programs	1	5
D.	Agricultural Career Opportunities	1	2
E.	Agricultural Mechanics	19	48
F.	Animal Science	6	15
G.	Soil Science	3	10
H.	Plant Science	7	20
I.	Economic Principles	2	5
J.	Horticulture	3	5
K.	Conservation	5	10
	TOTAL	47	120

RECOMMENDATIONS

The following recommendations are made at the conclusion of this project. First, we recommend that the lesson plans be used for a period of one year, and those who use them be questioned for their evaluation.

Secondly, we recommend that these same persons be asked to contribute ideas for improvement they have used in their schools.

Third, we recommend that only those teachers be issued the lesson plans who are informed as to their use and content.

Fourth, we recommend the development of a reference core for use with the lesson plans, including a series of transparancies for the overhead projector and reference materials annotated and rated for relevancy to each of the modules.

Fifth, we recommend a further development of similar materials for advanced classes in agriculture including the areas of specializations.

Sixth, we recommend that the new teachers each year be made aware of the core lessons and provided with a set for their use in building their courses of study.

SUMMARY

The project was designed to develop a series of lesson titles and then plans for each of the titles to provide a two thirds core program for ninth and tenth grade vocational agriculture classes. This core would provide more uniformity of experience and knowledge on the part of first and second year students of vocational agriculture.

A final report on the Core Curriculum Project for Vocational Agriculture I and II, included the following.

The series of meetings to distribute the core materials have now been completed and the following summary will show the results.

Date	Location	Sets Distributed	Attendance
3-17-69	Winnemac	14	13
3-18-69	North Davies	19	17
3-19-69	Seymour	27	26
3-26-69	Darlington	17	13
4-2-69	Shenandoah	22	18
4-7-69	South Whitley	24	19
	TOTALS	123	106

The extra sets represented those from multiple-teacher departments where one teacher picked up a set for his partner.

On the whole, the materials were well received by the group and interest was expressed in continuing the series to include Agriculture III and IV in production agriculture as well as in the specialization fields.

A panel of consultants was selected and they met three times to set up the lesson titles and review the lessons when they were completed. The lesson plans were prepared and printed. The lesson plans were presented to the Indiana Vocational Agriculture teachers through a series of area meetings set up to explain their organization, purpose, and use.

Recommendations were made for use the improvement of the lessons, for the development of a reference core and development of similar series in other agriculture courses including specialization.

INDIANA RESEARCH COORDINATING UNIT

Project Number 116

SURVEY OF OCCUPATIONAL AND MANPOWER NEEDS

Grant Number 3-6-02717-2144

Purpose:

The purpose of this study was to secure information about the job opportunities that are available on the farms and in non-farm agricultural occupations in a five county area in Indiana, to provide a basis for occupational guidance in agriculture, to list competency areas needed for employment in the identified jobs, to aid in planning new programs in agricultural education, and to determine manpower needs in jobs needing competencies which could be taught in vocational agricultural programs.

SPECIFIC OBJECTIVES OF THE STUDY

1. To identify present and emerging agricultural occupations by job title.
2. To determine the number of persons presently employed and the number likely to be employed in the future.
3. To estimate the entry opportunities in present agricultural occupations due to turnover and creation of new jobs.
4. To determine the competencies to be taught to prepare individuals for the identified jobs.
5. To identify competency areas to be used in the planning of the content of vocational agriculture programs.
6. To determine the need for specific training programs.

Procedure:

Data were gathered by survey forms. The survey forms were completed by trained vocational agricultural instructors through personal interviews with owners, managers, or other persons in the businesses or on the farms that were selected who were considered best qualified to provide the desired information about the occupations within the businesses and the business itself.

Lists of the total populations of the non-farm businesses were completed by local instructors of vocational agriculture with help by the research team, Chamber of Commerce personnel, the Indiana Industrial Development Commission and other individuals in the communities who were familiar with the businesses within each selected area.

From the prepared list, firms were classified into seven classes a according to the type of product or service provided to agriculture. A proportionate number of each list were identified by random sampling to select the 100 firms to be interviewed.

For the on-farm survey, sections of land were identified by the research team with the help of the county surveyors to determine those sections which are predominately devoted to farming. Each of the identified sections of land in the selected counties were numbered and by random sampling, sixty sections were identified for the survey sample. Each farm operator, and/or manager living on the sixty sections was interviewed.

Basic treatment of the data was by cross-tabulation procedures and computing means; by placing the data in distribution tables; and by comparing differences between job titles, types of businesses, size of farm operations, and competency areas.

Results:

The on-farm survey showed a .9 per cent projected increase in employment from 1968 to 1973 with an annual entry need of 459 employees for the five counties.

The off-farm survey showed a 1.2 per cent projected increase in employment from 1968 to 1973 with an annual entry need of 674 employees for the five counties.

The combined annual entry need for on-farm and off-farm agricultural employment of 1133.69 is an average of 49.3 annual entry needs per school corporation.

Individuals survey indicated that slightly over 15 per cent should have post high school training and almost 10 per cent should complete a college degree.

The subject matter area of Agricultural Mechanics rated as the area for greatest need of training for both on-farm and off-farm entry employment. The area of Animal Science received the lowest average rating for both employment areas.

Individual competency items were tabulated both by percentage of operators indicating the item as required, desirable or unnecessary, and by a combined mean value.

The data were supplied to the school corporations in the five county area with special interpretations of results to the vocational agriculture instructors in the corporations and to the State Department of Public Instruction, Vocational Agriculture Division, for their use.

INDIANA RESEARCH COORDINATING UNIT

Project Number 117

Grant Number 3-6-02717-2144

DIVISION OF RESPONSIBILITY FOR MULTIPLE TEACHER VOCATIONAL AGRICULTURE DEPARTMENT

Coordinator:
Charles Wolf
Tipton High School

Purpose:

The purpose of the pilot study, conducted in the Tipton Community Schools during the 1968-69 school year, was to demonstrate the practicality of establishing guidelines for multiple teacher departments of Vocational Agriculture. These guidelines were recommended in part by the state supervisor's office and in part by the teachers involved in the study. The program was evaluated by a committee composed of the state supervisor, a representative from the teacher training staff at Purdue University, local school administrators, and the teachers involved.

It was found that a carefully planned program of responsibility division could be useful in carrying out a succesful educational program, and at the same time not over burden any one teacher. From the results obtained in this study, it can be concluded that the following divisions are feasible:

1. One teacher be designated as head of the department.

2. Each teacher should be responsible for teaching some all-day classes.

3. Each teacher is basically responsible for the follow-up of his students.

4. One teacher should be responsible as head FFA Advisor with each of the other teachers assisting in specialized areas.

5. One teacher should be in charge of the adult education program, but all teachers should assist in the program.

6. One teacher should be in charge of the Agricultural Occupations program.

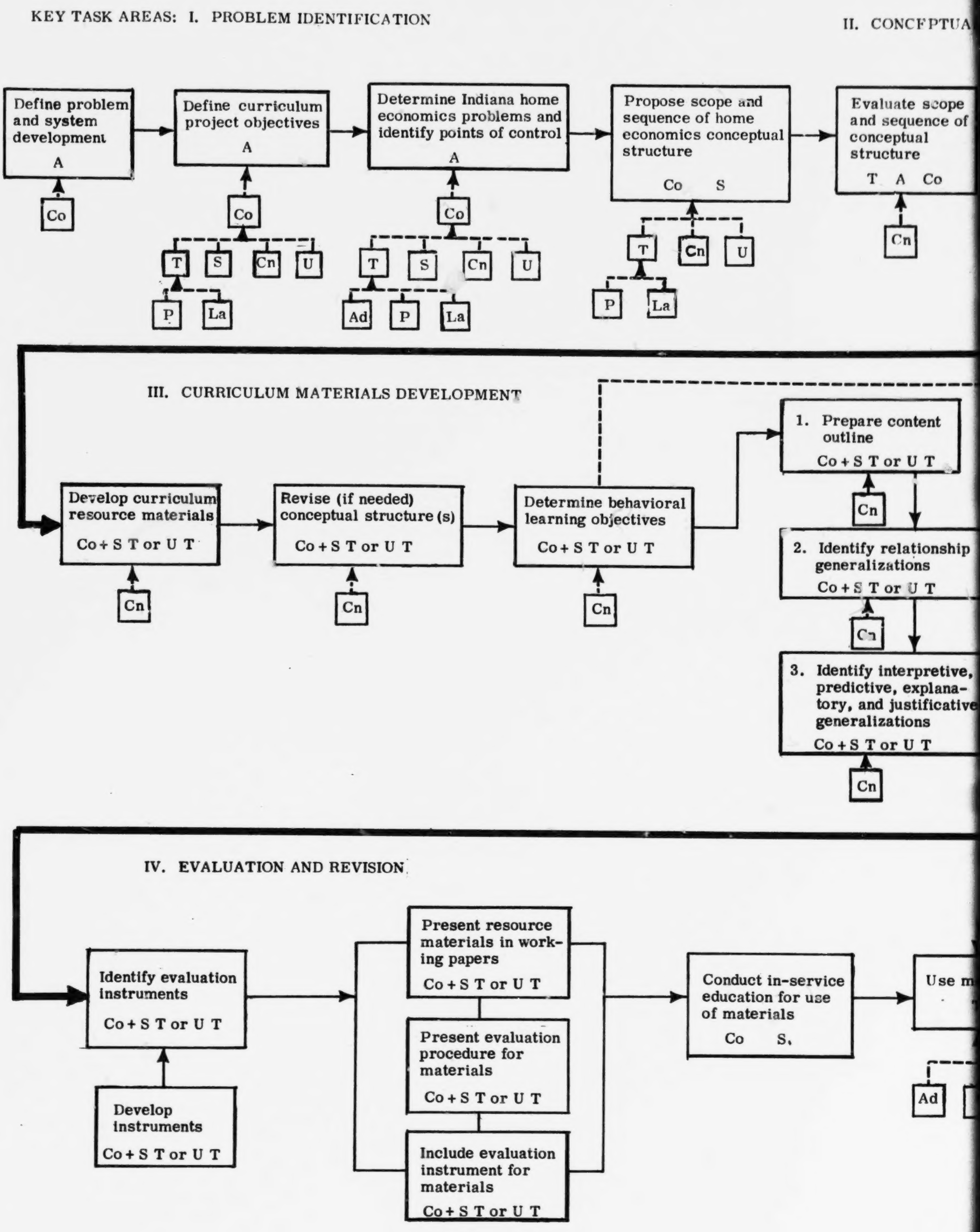
7. Absences from school, as well as vacations, should be planned in order to allow the work of the department to go on smoothly.

8. Meetings of teachers should be held frequently to coordinate and plan the department activities.

In summary, written guidelines are practical and very useful for multiple teacher Vocational Agriculture Departments. These guidelines should be developed cooperatively by teachers and administrators involved. If this is done, the demands of all will be served.

PROJECT

EXHIBITS


KEY TASK AREAS: I. PROBLEM IDENTIFICATION
II. CONCEPTUA
Define problem and system development
A
Co
Define curriculum project objectives
A
Co
T
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Cn
U
P
La
Determine Indiana home economics problems and identify points of control
A
Co
T
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Cn
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P
La
Propose scope and sequence of home economics conceptual structure
Co S
T
Cn
U
P
La
Evaluate scope and sequence of conceptual structure
T A Co
Cn
III. CURRICULUM MATERIALS DEVELOPMENT
Develop curriculum resource materials
Co + S T or U T
Cn
Revise (if needed) conceptual structure (s)
Co + S T or U T
Cn
Determine behavioral learning objectives
Co + S T or U T
Cn
1. Prepare content outline
Co + S T or U T
Cn
2. Identify relationship generalizations
Co + S T or U T
Cn
3. Identify interpretive, predictive, explanatory, and justificative generalizations
Co + S T or U T
Cn
IV. EVALUATION AND REVISION
Identify evaluation instruments
Co + S T or U T
Develop instruments
Co + S T or U T
Present resource materials in working papers
Co + S T or U T
Present evaluation procedure for materials
Co + S T or U T
Include evaluation instrument for materials
Co + S T or U T
Conduct in-service education for use of materials
Co S
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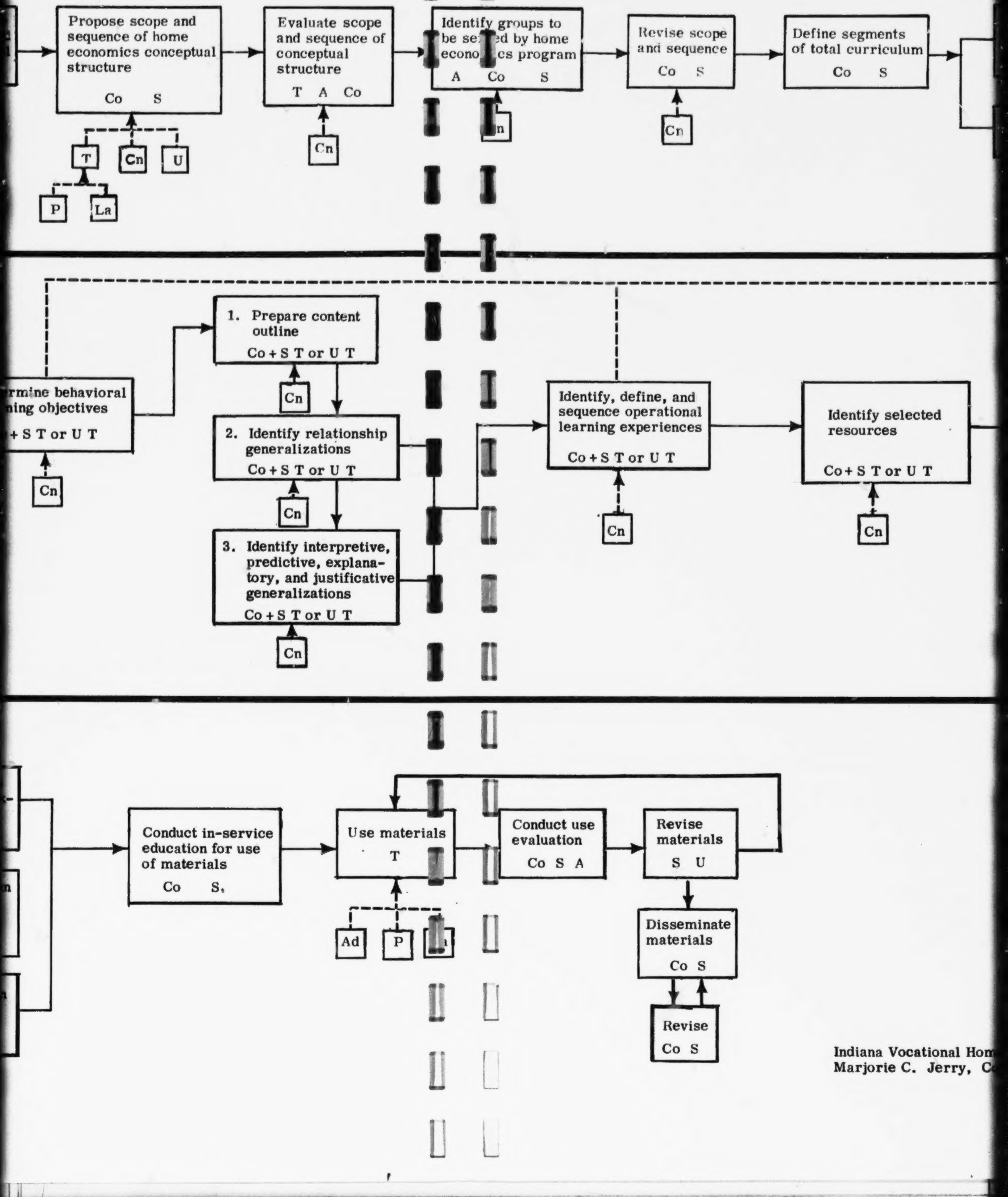
Ad

SYSTEM ANALYSIS FOR HOME ECONOMICS CURRICULUM DEVELOPMENT IN INDIANA

II. CONCEPTUAL DEVELOPMENT


Propose scope and sequence of home economics conceptual structure
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Evaluate scope and sequence of conceptual structure
T A Co
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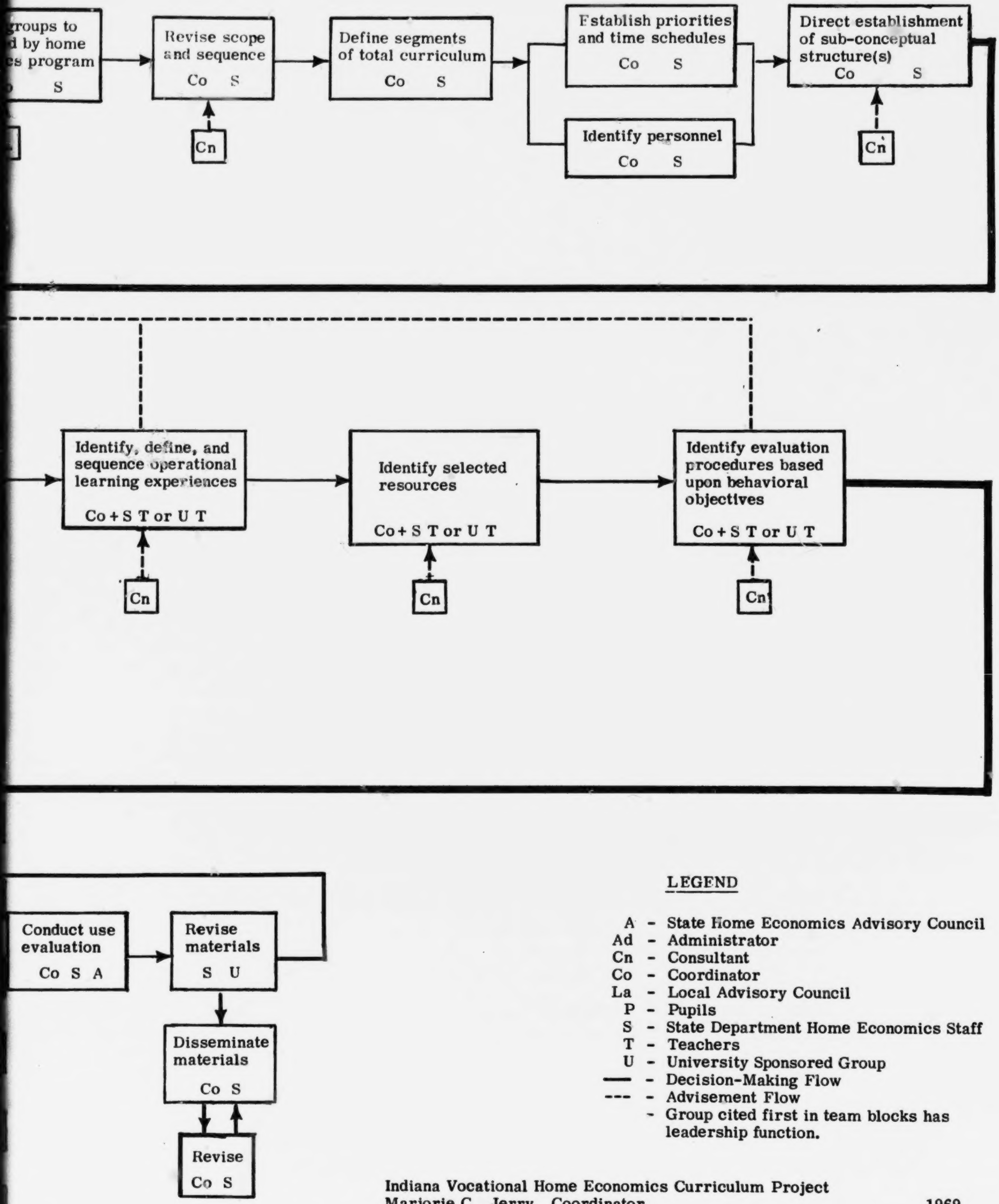
Identify groups to be se ed by home econo cs program
A Co S
n
Revise scope and sequence
Co S
Cn
Define segments of total curriculum
Co S
rmine behavioral
ning objectives
+ S T or U T
Cn
1. Prepare content outline
Co + S T or U T
Cn
2. Identify relationship generalizations
Co + S T or U T
Cn
3. Identify interpretive, predictive, explanatory, and justificative generalizations
Co + S T or U T
Cn
Identify, define, and sequence operational learning experiences
Co + S T or U T
Cn
Identify selected resources
Co + S T or U T
Cn
Conduct in-service education for use of materials
Co S
Use materials
T
Ad
P
Conduct use evaluation
Co S A
Revise materials
S U
Disseminate materials
Co S
Revise
Co S

Indiana Vocational Hom
Marjorie C. Jerry, C

UM DEVELOPMENT IN INDIANA

NT


groups to
d by home
es program
S
Revise scope and sequence
Co S
Cn
Define segments of total curriculum
Co S
Establish priorities and time schedules
Co S
Identify personnel
Co S
Direct establishment of sub-conceptual structure(s)
Co S
Cn
Identify, define, and sequence operational learning experiences
Co + S T or U T
Cn
Identify selected resources
Co + S T or U T
Cn
Identify evaluation procedures based upon behavioral objectives
Co + S T or U T
Cn
Conduct use evaluation
Co S A
Revise materials
S U
Disseminate materials
Co S
Revise
Co S

LEGEND

A - State Home Economics Advisory Council
Ad - Administrator
Cn - Consultant
Co - Coordinator
La - Local Advisory Council
P - Pupils
S - State Department Home Economics Staff
T - Teachers
U - University Sponsored Group
— - Decision-Making Flow
--- - Advisement Flow
- Group cited first in team blocks has leadership function.

Indiana Vocational Home Economics Curriculum Project
Marjorie C. Jerry, Coordinator 1969

SYSTEM ANALYSIS FOR HOME ECONOMICS CURRICULUM DEVELOPMENT IN INDIANA

Office of State Superintendent of Public Instruction
Richard D. Wells

Director of Vocational Education
Don Pennington

State Supervisor of Home Economics
Isabel L. Reynolds

Coordinator, Vocational Home Economics Curriculum Project
Marjorie C. Jerry

Preparation and dissemination of this publication was sponsored by the:

Indiana RESEARCH COORDINATING UNIT
Walter J. Penrod, Director

INDIANA

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Vocational Instructional Materials Laboratory
Department of Vocational/Technical Education
Indiana State University
Terre Haute, Indiana

Interpretation of the
SYSTEM ANALYSIS FOR HOME ECONOMICS
CURRICULUM DEVELOPMENT IN INDIANA

Directions: Please read the following explanatory material as you attempt to follow the flow chart. Locate each item on the flow chart as information is given for that item. Comprehending each item step-by-step should make the use of the analysis system easier.

I. The flow chart

  A. The legend in the lower right-hand corner indentifies the kinds of information given on the flow chart.

    1. The letters indicate the person or organized group of persons who will assume the responsibility for the task segments. The appropriate letters are written in each small box on the chart.

    2. The broken lines between boxes indicate that the person or persons identified will advise only.

    3. The solid lines between boxes indicate that the person or persons identified will make the decision(s) necessary at that point in the flow.

  B. The direction of the flow is indicated by arrows.

  C. The main body of the chart identifies the four major tasks which must be completed in curriculum development. These four tasks stand out with Roman numerals and in capital letters:

      I. PROBLEM IDENTIFICATION
      II. CONCEPTUAL DEVELOPMENT
      III. CURRICULUM MATERIALS DEVELOPMENT
      IV. EVALUATION AND REVISION

  D. If two or more segments of a task are to be completed simultaneously, this is indicated by a branching of the main flow line. The first example of this is found in KEY TASK II. CONCEPTUAL DEVELOPMENT. [Establish priorities and time schedules] and [Identify personnel] are to be completed simultaneously.

  E. In KEY TASK III. CURRICULUM MATERIALS DEVELOPMENT, broken lines are shown without any arrow indicating direction of flow. This has been done to show a very close relationship between the segments of the task in the boxes so connected even though the boxes do not follow each other in immediate sequence on the flow chart.

F. In KEY TASK IV. EVALUATION AND REVISION, a closed loop appears. This indicates that the results of the use evaluation will be returned to the group who had directed the preparation of the working papers so that the recommended changes can be made before the materials are disseminated.

G. The final two boxes are joined by dual-direction arrows which indicate that no curriculum material will be assumed to be final. Continuous revision to keep materials current is considered an important aspect.

II. Definition of terms

(The following definitions should be consulted if you find any term on the flow chart which does not seem clear in meaning or which may be defined in more than one way. The terms selected for definition are given in the order of their appearance on the flow chart.)

A. "Task Area" refers to an identifying segment of the curriculum process under which a series of related jobs can be grouped.

B. "Scope and sequence of home economics conceptual structure" refers to the key ideas which are suggested for each subject for grade or level. For an ungraded program the sequential arrangement can still serve as a guide without consideration for the grade suggested.

C. "Define segments of the total curriculum" refers to the identification of portions of the total program for which curriculum materials should be developed as a package or coordinated presentation.

D. "Establish priorities" refers to the decision relative to the segment(s) of curriculum for which there is the most immediate need.

E. "Establish time schedules" refers to the decisions relative to assigning a calendar of times for producing materials--working papers and revised materials--to ensure that all aspects of the total home economics program will receive adequate attention and so that materials in all areas will be kept up-to-date.

F. "Sub-conceptual structure" refers to a breakdown into smaller ideas which would be appropriate for the development of each major concept on the scope and sequence. This sub-conceptual breakdown will facilitate the elimination of duplication among subject areas in developing curriculum materials and will assist teachers in the coordination of their instruction as individual teachers or as members of a department team.

G. "Direct establishment of sub-conceptual structure" refers to the leadership exerted in getting this job completed; however the actual preparation of the sub-conceptual structure may be a delegated responsibility.

H. "Behavioral learning objectives" refer to a statement of objectives which indicates the desired behavior each pupil will exhibit if he is to achieve the objective.

I. "Relationship generalizations" refer to statements which are universally true and indicate the kind of relationship which exists between the two or more concepts in the statement. The concepts in the statement are smaller or less broad ideas which are related to a larger concept under consideration.

J. "Interpretive, predictive, justificative, and explanatory generalizations" refer to the function of a universally true statement which represents a higher level of thinking than the relationship generalizations.

K. "Operational learning experience" refers to an instructional activity so worded that a clear explanation is given of the following:

1. The action to be performed by the pupil

2. The information and/or materials to be provided for the pupil

3. The amount and quality of performance to be expected from the pupil.

III. Identification of personnel

A. Coordinator refers to the person employed by the State Department of Public Instruction for the purpose of coordinating and directing home economics curriculum development in Indiana.

B. Consultant refers to any person utilized in the curriculum process to advise or assist as a need arises, such as subject matter specialists, specialists from other disciplines, personnel from related business fields, or lay personnel.

APPENDIX 1

A DEVELOPMENTAL PLAN FOR VOCATIONAL INDUSTRIAL PROGRAMS

A Research Problem in Vocational Cooperative Education

to be conducted by

Walter P. Chrysler Memorial High School
801 Parkview Drive
New Castle, Indiana 47362

Project Duration: May 15, 1968 through June 30, 1969

Submitted to the Indiana Department of Public Instruction,

Division of Vocational Education

January, 1968

Revised June, 1968

Donald G. Turchan
Superintendent
New Castle Community School Corp.

Walter Penrod
Acting Director, RCU

Beverly Hankenhoff
Project Director

H. Robert Hewlett
Vocational Director
Vocational Ed. Div., DPI

I. PROBLEM

To meet the needs of students by providing a sound program in Cooperative Training.

A. Students need to be prepared for life's work by cooperative training as well as in school vocational programs.

B. Students learn at different rates and by self motivation; therefore, flexible programs need to be developed in vocational education to provide increased student interest and improved instruction.

C. Qualified personnel should serve the cooperative students in both general and specific related instruction as well as coordination.

II. HYPOTHESIS

A Cooperative Training program can be started by using experienced vocational personnel and school instructors with specific industrial background.

A. Coordinators would team teach using both large group and small group instruction for teaching general related information to the students.

B. Instructors of industrial education courses could provide specific instruction for senior students enrolled in this cooperative training program.

C. More students would have opportunities to benefit from vocational cooperative education.

III. METHOD OF APPROACH

A successful cooperative program is one in which each enrollee would benefit from instruction by coordinators trained to teach general related information such as orientation to vocational education and human relations, and assisted by instructors of special areas when solving specific problems.

A. Selection of Students

1. Students selected for this program will have a minimum of 320 hours of industrial arts background.

2. Students will have a career objective in the area chosen for training.

3. In order to assure sound programs, for the first year, students will be selected from drafting, electricity-electronics, and mechanics areas.

4. Students will be recommended by instructors of the above areas for this program.

B. Scheduling

Two years ago Chrysler High School adopted flexible scheduling. This type of scheduling allows for more team teaching, more student time, and use of large groups, small groups, and independent study. All of these characteristics should provide needed student and teacher instruction time.

C. Staffing and Instruction

1. Experienced distributive education and office education teacher-coordinators will team teach general related information and do coordination with the training stations.

2. Teachers who are specialists in the selected areas will be scheduled to assist the student or students with specific related information and technical problems encountered at the training station. Most of this work will be done on an individual or small group basis.

3. Teachers of the selected areas will also be given time to visit the training stations with the coordinator.

4. Students in this program will have at least five hours of related class instruction each week.

D. Training Stations

Selected training stations will provide the student an opportunity for experience in all types of work involved in the occupation. Each training station will follow normal standards including signing a training agreement and work schedule, assigning a training sponser for each student trainee, and following laws and safety standards of the industry.

E. Grading and Evaluation of Student

The evaluation of the student will be a cooperative effort with the coordinator, training sponsor, and specific related teacher. The coordinator and sponsor could better evaluate attitudes, work habits and general vocational knowledge; while, the sponsor and specific related teacher could best evaluate skill development of the student.

F. Advisory Committee

An advisory committee to make recommendations and evaluate the program will be selected during the summer of 1968. This committee will meet at least once a month and evaluate work that has been completed and work that is planned and make recommendations.

G. Time Table of Activities

A tentative time table of activities is attached at the end of this report.

H. Forms

Forms necessary for this program will be developed as needed and copies of these forms will be forwarded with reports.

I. Reporting

1. A one page report on operation, procedure, and problems will be submitted monthly.
2. A quarterly report on expenditures and balances will be submitted.
3. The final report to be submitted in June, 1969, will include:
    - a. Activities which occurred.
    - b. Summary of Advisory Committee reports
    - c. Evaluation of program by community, participants, and school
    - d. Publicity on project
    - e. Evaluation Committee recommendations
    - f. Costs incurred

J. Finances

1. The local school corporation will schedule time for the coordinators and teachers involved in this program and will absorb this cost.
2. The state is requested to provide the following:

Clerical help	$3,200
Instructional materials and supplies	200
Office forms and supplies	100
Travel (local and state)	300
Testing and evaluation	250
Total	$4,050

IV. EVALUATION OF PROGRAM

A. A local evaluating committee will be used, with at least one member of the committee selected from the st vocational staff.

B. Pretesting and post-testing of employer attitudes and standards, as well as other criteria of the program will be used as much as possible.

C. Any testing or evaluation requested by the state will be completed, and recommendations made by the state will be followed.

TIME TABLE OF ACTIVITIES

January, 1968	Proposal made to Superintendent by Vocational Director and D.E. Coordinator and accepted. Proposal submitted to state.
February, 1968	Basic information concerning program presented to counselors for counseling and programming purposes. Also presented to specific information teachers.
March thru May, 1968	Holding all materials and information for state approval.
June, 1968	Informed of state approval List of all students in advanced drafting, electricity-electronics, and mechanics for 1968-69. Contact instructors for recommendations Prepare materials for program Check student credits and requirements to determine eligibility. Contact students recommended and eligible and hold meeting. Students interested complete application form for program. Contact employers to explain program and begin setting up placement standards and interviews.
July thru August, 1968	Continue employer contacts and interviews. Select Advisory Committee
Sept. 1968	Finalize interviews and have placements and training agreements completed.
Sept. thru June, 1969	Continue usual procedures for coop class Visit training stations at least once each two weeks Meet with advisory committee once a month Student evaluations by employer completed each nine weeks.
June, 1969	Complete and submit final report to state.

FINAL REPORT

A CORE CURRICULUM IN VOCATIONAL AGRICULTURE I AND II

William H. Hamilton

January 1969

This publication was prepared
under the sponsorship of the:

The Research and Coordinating Unit
of
The Office of State Superintendent of Public Instruction

INDIANA

R*esearch*

C*oordinating*

U*nit*

OFFICE OF THE STATE SUPERINTENDENT OF PUBLIC INSTRUCTION
Richard D. Wells, Superintendent

DIVISION OF VOCATIONAL EDUCATION
Walter J. Penrod, Director

Vocational Instructional Materials Laboratory
Department of Vocational/Technical Education
Indiana State University
Terre Haute, Indiana

ACKNOWLEDGEMENTS

We wish to acknowledge the efforts of many people in the planning of this lesson core for Agriculture I and II.

Among these people were the following teachers of vocational agriculture:

Carlton Clevenger, Monroe Central High School
Jerry Cook, Wolcott High School
Lonny Harts, Northfield High School
Ronald Larew, Darlington High School
William McVay, South Whitley High School
Lawrence Ralston, Milan High School
Donald Shuppert, Plymouth High School

These men acted as consultants and reviewed the lessons after they were prepared.

Dr. James P. Clouse wrote the original project proposal and aided the panel in setting up the lesson titles for the vocational agriculture I and II cores.

Mr. Thomas Rhoads planned the lessons with the help and direction of Dr. William Hamilton. Mrs. Rhoads prepared the lessons for the review panel and for the printer.

The project was funded by the Indiana Research and Coordinating Unit, Mr. Walter Penrod, Director, through the Benton Community School District of Fowler, Indiana. Mr. Charles Pratt is superintendent and Mr. Rod McKinney is the vocational director.

The printing was completed by the Instructional Materials Laboratory of Terre Haute under the direction of Mr. Tom Eachus.

Project Director

Dr. William H. Hamilton
Assistant Professor
Agricultural Education
Purdue University

Principal Investigator

Mr. Thomas Rhoads
Graduate Student, Agricultural Education
Purdue University

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Appendix . . . .
(Attached Core Curriculum for Agriculture I and II)

INTRODUCTION

An increasing amount of attention in Indiana is being focused on vocational education. The increasing use of specialized programs in agriculture and the development of area vocational schools containing these programs emphasizes the values of a core or base of education on which to build these specialized programs.

Traditionally we have held the local situation should dictate the course of study to be pursued. While we are unwilling to abandon this position completely, we believe modern agriculture is more consistent over a wide area than was true a generation ago. As a result, a number of benefits can be derived from some degree of uniformity in basic agricultural science taught in the high school.

This project was conceived with these goals in mind:

1. Help local schools respond to trends and needs created by changes in agricultural occupations.
2. Revised occupational goal training in line with PL 88-210.
3. Provide a two-thirds core for Vocational Agriculture I and II with lesson plans for each lesson title in the core.
4. Have these lessons reviewed by a panel of consultants and prepared for printing and distribution to vocational agriculture teachers.

METHOD

The method of development of the lesson plans has been to call a group of teachers together to set up the core of lesson titles and later to review the lessons planned and make recommendations concerning the lessons.

Three meetings of the panel of consultants were held. At the first the list of lesson titles was adopted and a few lessons examined and a lesson format adopted.

At the second meeting of the panel the lessons in all areas except economics and farm mechanics were reviewed. At the third meeting of the panel the agricultural mechanics and economics lessons were reviewed.

The lesson planner gathered typical reference materials used in local vocational departments and then developed plans making use of these materials as sources. The completed group of lessons appear as the appendix of this report.

The completed lessons were prepared for printing on a loose-leaf basis. This was designed to build in the greatest possible amount of flexibility for their use by local teachers.

In order to prevent the lesson plans from being dust gathering items instead of useful tools to the teachers, distribution was made only on special request or on the basis of teachers' attendance at one of a series of meetings designed to present and explain the lessons to the teachers.

RESULTS

A total of 64 lessons were planned for a two-thirds core for Vocational Agriculture I, and 53 lessons were planned for a two-thirds core for Vocational Agriculture II. Of these lessons in Vocational Agriculture I, 3 titles were in introduction and orientation, 14 titles were in the Future Farmers of America module, 7 titles were in agricultural experience programs, 1 in agricultural career opportunities, 13 in agricultural mechanics, 9 in animal science, 7 in soil science, and 10 in plant science. This breakdown of the number of lesson titles in each module is shown in Table I. Table II shows the same type of breakdown for the Agriculture II core.

TABLE I.

MODULES AND LESSONS IN THE AGRICULTURE I CORE

	Module	No. of Lessons	Recommended Hours
A.	Introduction and Orientation	3	2
B.	Future Farmers of America	14	20
C.	Agricultural Experience Programs	7	15
D.	Agricultural Career Opportunities	1	2
E.	Agricultural Mechanics	13	46
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G.	Soil Science	7	10
H.	Plant Science	10	10
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TABLE II

MODULES AND LESSONS IN THE AGRICULTURE II CORE

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D.	Agricultural Career Opportunities	1	2
E.	Agricultural Mechanics	19	48
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J.	Horticulture	3	5
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RECOMMENDATIONS

The following recommendations are made at the conclusion of this project. First, we recommend that the lesson plans be used for a period of one year, and those who use them be questioned for their evaluation.

Second, we recommend that these same persons be asked to contribute ideas they have used in their schools for improvement of the lessons.

Third, we recommend that only those teachers be issued the lesson plans who are informed as to their use and content.

Fourth, we recommend the development of a reference core for use with the lesson plans, including a series of transparencies for the overhead projector and reference materials annotated and rated for relevancy to each of the modules.

Fifth, we recommend a further development of similar materials for advanced classes in agriculture including the specializations.

Sixth, we recommend that the new teachers each year be made aware of the core lessons and provided with a set for their use in building their courses of study.

SUMMARY

The project was designed to develop a series of lesson titles and then plans for each of the titles to provide a two-thirds core program for ninth and tenth grade vocational agriculture classes. This core would provide more uniformity of experience and knowledge on the part of first and second year students of vocational agriculture.

A panel of consultants was selected and they met three times to set up the lesson titles and review the lessons when they were completed. The lesson plans were prepared and printed. The lessons plans were presented to the Indiana Vo-Ag teachers through a series of area meetings set up to explain their organization, purpose, and use.

Recommendations were made for use and improvement of the lessons, for the development of a reference core and development of similar series in other agriculture courses including specializations.